

## ABSTRACT

5 The present invention relates to a nano-calcium phosphates/collagen composite that mimics the natural bone, both in composition and microstructure, as well as porous bone substitute and tissue engineering scaffolds made by a complex of said composite and poly(lactic acid)(PLA) or poly(lactic acid-co-glycolic acid)(PLGA). The invention also relates to the use of said scaffold in treating bone defect and bone fracture.